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SOUTHERN FOREST EXPERIMENT STATION, FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE

SOUTHERN STATION OBSERVES 50th ANNIVERSARY OF FOUNDING

"To meet our goals of providing goods and services in a quality environment, we must build upon a strong foundation of research." So said Forest Service Chief Edward P. Cliff at an international forestry conference in Florida recently.

Providing blocks for this foundation is the job of the Southern Forest Experiment Station, which this year is observing the fiftieth anniversary of its founding.

A staff of four technical men and a clerk with a total budget of \$17,900 began an investigation of the growth and yield of southern pines in July 1921.

Today, as one of eight regional research organizations of

the Forest Service, the Station has more than 100 scientists and

CELEBRATIONS PLANNED

The New Orleans headquarters and the major field offices plan 1-day celebrations to observe the golden anniversary of the Station's founding. Details will be announced locally. Following is the schedule for these events:

Nacogdoches, Tex.	July 8
Fayetteville, Ark.	July 9
Sewanee, Tenn.	July 12
Alexandria, La.	July 13
Brewton, Ala.	July 14
Auburn, Ala.	July 15
Tuskegee, Ala.	July 15
Gulfport, Miss.	July 16
State College, Miss.	July 19
Stoneville, Miss.	July 20
Oxford, Miss.	July 21
New Orleans, La.	July 23

250 supporting personnel in laboratories scattered through the Midsouth from Tennessee and Alabama to Texas. Their research is aimed at producing wood for American consumers, protecting forests against fire and pests, managing forested watersheds, providing forage for cattle and habitat for wildlife, opening and expanding forest products markets, and developing the recreation potential of forest land.

In this issue we are taking both a look back and a look ahead. We have tried to sketch the conditions that the Station confronted in its early years and the contributions its scientists made in improving the South's forest environment.

Institute of Northern Forestry
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The First Fifty-- **Early Research Helps**

Many of the Station's research developments in growing, maintaining, harvesting, replenishing, and enjoying the fruits of forest land have been tested and put into practice during the past 50 years.

Stump-strewn acres shorn of virgin timber have been planted and are putting forth vigorous forests for new needs. Barren gullies and stream banks washed away through erosion have been healed by planting.

Dwindling deer herds have boomed with improved forest vegetation. Ways to control damaging insects and diseases in a manner compatible with healthy forest environment have been tested and put into practice.

But today people want better houses, better shopping centers, and better roads. They also want pure water, clean air, open space, and other improvements in the environment. They are demanding that natural resources be developed, protected, and improved. At the same time, expanding cities, highways, utility lines, and airports are gobbling up land. The result is that the forest area is continually lessening, while more people are demanding that it give them more benefits. Finding ways to meet these spiraling demands, then, is the challenge for today's researchers.

In The Beginning

Scientists and friends gathering to observe the 50th anniversary at research installations scattered over the Station's seven-State area are recalling what it was like in the beginning.

Four technical men and a clerk comprised the original staff, which began work July 21, 1921, in Room 323 of the Custom House in New Orleans. According to one, it wasn't actually a room, but a walled-off end of a corridor, with a single window. Room 326, to which the Station moved in 1926, had two windows with sills broad enough for sand-flat germination tests.

High priority in the early years was given to collecting growth and yield data for unmanaged

To Meet New Problems

second-growth loblolly, longleaf, shortleaf, and slash pines. This information was published in 1929. With its appearance landowners began to recognize the opportunities in managing existing pine stands and in planting trees on cutover lands.

As staff members were added, they undertook research on fire effects on forest land, economic possibilities of hardwoods, tree planting, naval stores production, and forest grazing. Beginning a pattern that has continued to the present, the Station established research teams at strategic locations.

In recalling equipment for early studies, a scientist tells of "checking out the Station's compass—we didn't get our second compass until 1925." Two Model-T Fords were the Station's rolling stock for making an extensive survey.

Research Expanded

With the 1930's came the depression. Federal emergency funds enabled the Station to expand, and earlier studies began to bear fruit.

The lumber industry adopted chemicals developed by Station scientists to control sapstain and mold on southern pine lumber.

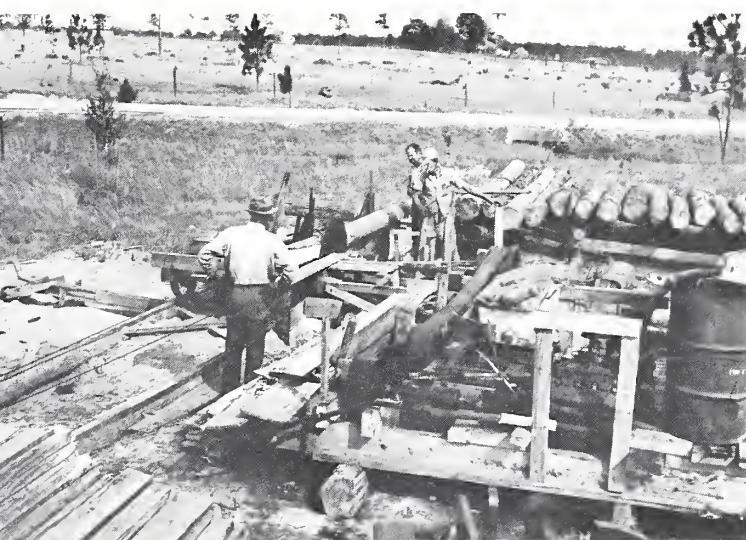
Data from forest surveys convinced pulp manufacturers that the South had wood. The industry began moving South, and 38 pulpmills were in operation or building in the region by 1937.

Selection cutting of southern pines, pioneered and demonstrated by Station scientists, enabled industry to keep operating while making the transition from unmanaged to managed stands.

A Station publication made available for the first time information on the distribution and characteristics of principal hardwood species in the southern bottom lands.

Flooding and erosion in southern river basins was serious. Station researchers undertook to learn how establishing tree cover on critical areas could heal eroding gullies. Old-timers recall that a laboratory in which to treat seed, measure seedlings, and weigh soil samples from erosion-con-





trol studies was set up in an abandoned chicken house purchased for \$5. In contrast, when they revisit the Station for the anniversary they will hear about the new electron scanning microscope and inspect the gas chromatograph and atomic absorption spectrophotometer.

Aid in War Effort

World War II changed research emphasis in the early 1940's.

To raise production of gum naval stores for war needs, the Station developed the system of stimulating gum flow by spraying turpentine faces with sulfuric acid. This development revolutionized naval stores techniques.

Many scientists were pulled off regular research and assigned to tasks such as growing Russian dandelion and goldenrod plants for rubber, freeing airfields from undesirable vegetation, camouflaging military installations, and evaluating priority requirements for logging and milling equipment. They also improved fire protection on critical areas and gathered information for the War Production Board.

Pathologists showed how carefully planned prescribed burns could control brown-spot needle blight, the worst disease of longleaf pines.

Principles Put Into Practice

Postwar economic growth enabled landowners to put large tracts of forest under intensive management. The Station had the satisfaction of seeing the principles it had developed and advocated put into widespread practice.

To further the effort, researchers developed a method of seeding pines directly in the field, devised greatly improved ways of getting rid of cull trees, and published a book that became the bible of southern pine tree planters. It also issued the first comprehensive guide to the management of hardwoods on bottom lands.

Plotless timber cruising, an idea originated in West Germany and developed by the Station, advanced the science of measuring forests.

A program of supplemental feeding, coupled with good herd and range management, enabled cattlemen to double production of cattle grazing on forest range.

Entomologists showed that soil treatments afford long-lasting protection against termites. Pathologists improved methods for preventing

the decay of wood in storage or service and established that presowing soil fumigation would prevent rootrot in forest nurseries.

Ready for Future

With the conservation-conscious public making ever-growing demands on all forest resources, research in the 1960's addressed itself to the basic processes of plant life and forest ecology. Scientists dealt with an ever-widening range of subject matter in laboratories with the most sophisticated equipment available.

Genetic studies resulted in cottonwood clones capable of very fast growth. Longleaf pines with resistance to brown-spot needle blight and rust-resistant strains of slash pine were selected for propagation and distribution in the 1970's.

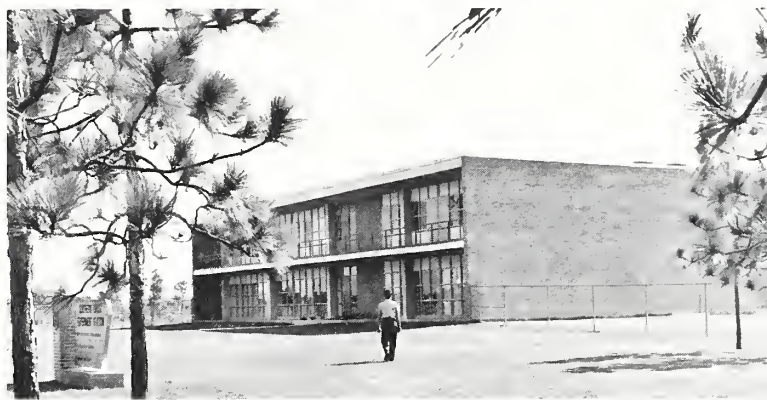
Station economists aided the pulpwood industry by analyzing the situations in which machines could be substituted for men in the punishing task of harvesting bolts. They pioneered the analysis of stumpage price behavior and provided regional appraisals of the softwood plywood industry, and they developed the scientific basis for scaling timber by weight.

The Station's wood technologists were instrumental in developing the chipping headrig, which squares up logs without creating either sawdust or slabs. Their data proved important in developing manufacturing standards for southern pine plywood, a product that was born in the mid-1960's and has grown mightily. They showed how laminated beams can be assembled on a principle that greatly increases their strength. And they devised a kiln schedule for drying studs in 24 hours with minimum degrade.

To encourage students in minority groups to seek college degrees in forestry, the Station cooperated in an experimental program—the first of its kind in the Nation. A project was begun to enhance recreational and economic forest opportunities for black residents of the rural South.

As part of the Nation's space program, a Station scientist tested effects of moon soil on earth's plants, finding it helpful, not harmful.

Forging into the 1970's, the Station's staff are pausing only briefly to look backward. They know that the business of a research organization is with the future. They submit that they are ready, with laboratories, personnel, and ideas, for service in the momentous times ahead.



By Their Work They Are Remembered



J. A. Putnam



R. M. Lindgren



I. F. Eldredge

M. M. Lehrbas



To conceive ideas and test them objectively is the task of a research organization. Though the testing may be facilitated in various ways, the ideas themselves must come from the minds of men. In research, an organization is only as good as its staff.

In grateful acknowledgment of this principle, the Southern Forest Experiment Station prints the pictures of many former staff members. Along with others whose photographs could not be found, these men powerfully aided in shaping the course of southern forestry. With few exceptions they are shown during their active days with the Station. Now they are scattered, but they are still known to numerous land managers with whom they worked in the development of their ideas. Indeed, to thank the coworkers for a half-century of essential advice and support is a main purpose in offering the pictures.

These men were researchers, which is to say they were individualists. They thought their own thoughts, lived their own lives, did their own work. Their attitude toward forms and paper work was irreverent, and the most cooperative among them

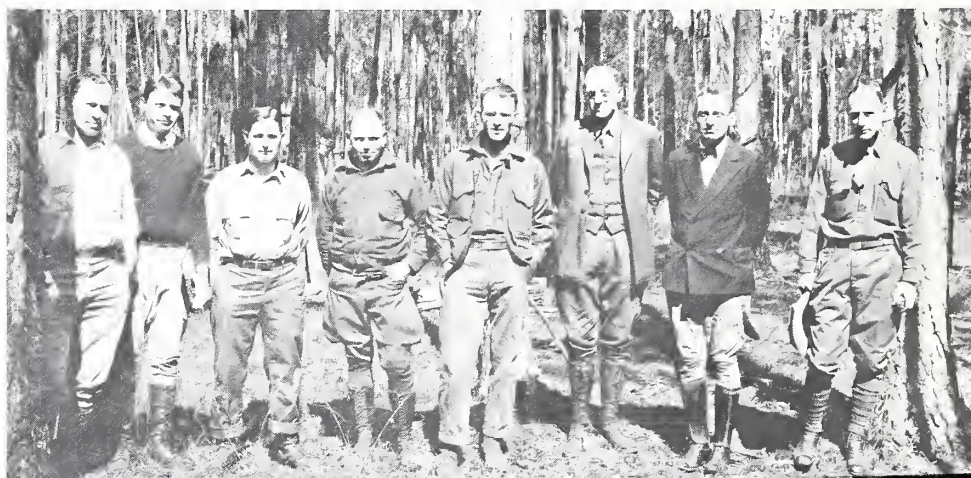
regarded supervisors as peers who through misfortune had been relegated to an inactive part of the arena.

Lacking conformity, they nevertheless had abundant faith. One and all felt that it was noble to work to grow green trees and to use them wisely for manifold human purposes. In this faith they were loyal to the Station and to the Forest Service, each in his own fashion. Believing this, they endured, dared, toiled, proved, and persuaded.

Their best fame is in the forests now flourishing on many thousands of acres that formerly lay barren. But they earned the conventional scientific recognitions also. Their manuscripts were published by leading journals and by the U. S. Department of Agriculture. Six of the men pictured hold Pinchot, Schlich, or Moore medals conferred by the Society of American Foresters for outstanding professional achievement. At least eight received the Superior Service award from the Secretary of Agriculture.

Names have been printed below the pictures, and nothing more. By their work they are remembered.

Left to right: F. I. Righter, V. L. Harper, James Beal, Lenthall Wyman, Perkins Coville, C. F. Korstian, Carl Hartley, P. V. Siggers, 1929.

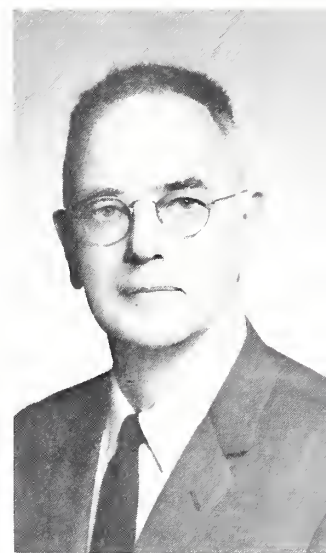




Left to right, front row: L. J. Pessin, E. W. Gemmer, V. L. Harper, E. L. Demmon, G. H. Lentz, Lenthall Wyman, P. C. Wakeley, W. G. Wahlenberg. Second row: W. E. Bond, C. F. Olsen, R. B. Craig, P. V. Siggers, J. A. Putnam, V. B. Davis, A. R. Spillers, H. G. Meginnis, R. K. Winters. Back row: Henry Bull, Allen Bickford, F. K. Beyer, Ellery Foster, J. A. Lubbe, P. R. Wheeler, J. W. Cruikshank, E. B. Faulks, R. R. Reynolds, M. M. Lehrbas. 1932.



Left to right: G. H. Lentz, J. A. Putnam, J. W. Cruikshank, M. M. Lehrbas, Henry Bull. 1931.

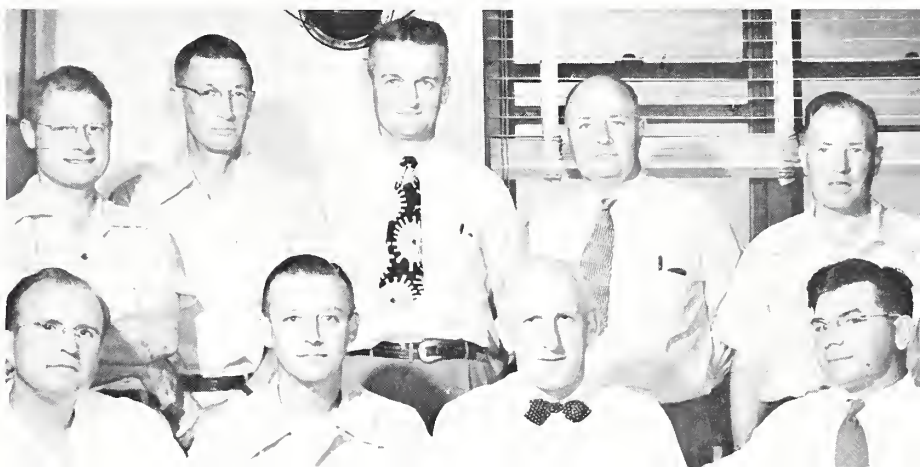


P. C. Wakeley



R. A. Chapman

Left to right; front row: T. E. Maki, N. B. Griswold, C. A. Connaughton, C. Mesavage. Back row: J. T. Cassady, R. R. Reynolds, H. D. Burke, J. A. Putnam, H. L. Person. 1949.





A. F. Verrall



G. K. Stephenson



R. R. Reynolds



H. G. Meginnis



G. H. Hepting



L. R. Grosenbaugh

THE DIRECTORS



R. D. Forbes
1921-27



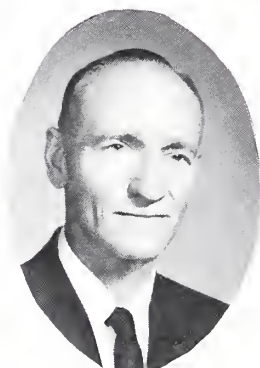
E. L. Demmon
1927-44



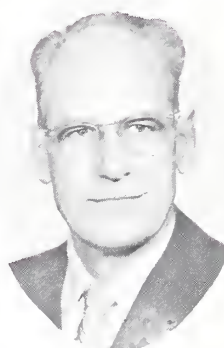
C. A. Connoughton
1944-51



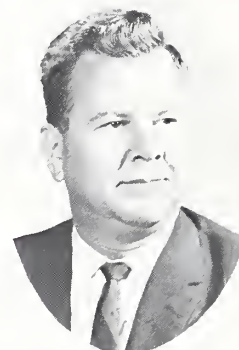
H. L. Mitchell
1951-53



P. A. Briegleb
1954-63



W. M. Zillgitt
1963-66



T. C. Nelson
1966-70